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Approved for use through 10/31/2002, GMB 851-0031
3 Patent & Trademerk Office; U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449A/PTO	Complete if Known	Under the Paperson's Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Complete if Known				
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Application Number	Unknown 10/789,047				
(Use as many sheets as necessary)	Filing Date	Even Date Herewith				
	First Named Inventor	Ahn, Kie				
	Group Art Unit	Unknown Z8/5				
	Examiner Name	Unknown A. WILSON				
Sheet 1 of 7	Attorney Docket No: 1	1303.050US2				

US PATENT DOCUMENTS						
Examin er Initial	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Class	Subclass	Filing Date If Appropriate
ave	US20020089023	07/11/2002	Yu, Zhiyi , et al.	257	411	01/05/2001
,	US20020001971	01/03/2002	Cho, Hag-ju	438	765	06/27/2001
	US20020155688	10/24/2002	Ahn, Kie Y., et al.	438	592	04/20/2001
	US20020155689	10/24/2002	Ahn, Kie Y., et al.	29	76	02/11/2002
	US20020192974	12/19/2002	Ahn, Kie Y., et al.	438	722	06/13/2001
	US20020025628	02/28/2002	Derderian, Garo J., et al.	438	253	06/14/2001
	US20020164420	11/07/2002	Derderian, Garo , et al.	248.1	427	02/25/2002
	US20030017717	01/23/2003	Ahn, Kie Y., et al.	438	768	07/18/2001
	US20030045082	03/06/2003	Eldridge, Jerome , et al.	438	593	02/20/2002
	US20030207032	11/06/2003	Ahn, Kie Y., et al.	427	255.34	05/02/2002
	US20030207593	11/06/2003	Derderian, Garo J.	438	778	05/02/2002
	US-4,215,156	07/29/1980	Dalal, Hormazdyar M., et al.	427	84	08/26/1977
	US-4,333,808	06/08/1982	Bhattacharyya, Arup , et al.	204	192 D	02/13/1981
	US-4,394,673	07/19/1983	Thompson, Richard D., et al.	357	15	09/29/1980
	US-4,399,424	04/16/1983	Rigby, Leslie J.	338	34	10/05/1981
	US-4,413,022	11/01/1983	Suntola, Tuomo S., et al.	427	255.2	06/21/1979
	US-4,647,947	03/03/1987	Takeoka, Yoshikatsu , et al.	346	135.1	09/13/1985
	US-4,920,071	04/24/1990	Thomas, Michael	437	188	08/18/1987
	US-5,055,319	10/08/1991	Bunshah, Rointan F., et al.	427	38	04/02/1990
	US-5,080,928	01/14/1992	Klinedinst, Keith A., et al.	427	70	10/05/1990
	US-5,198,029	03/30/1993	Dutta, Arunava, et al.	118	303	02/19/1992
	US-5,595,606	01/21/1997	Fujikawa, Yuichiro , et al.	118	725	04/18/1996
	US-5,698,022	12/16/1997	Glassman, Timothy E., et al.			08/14/1996
	US-5,795,808	08/18/1998	Park, Bo	438	301	11/12/1996
	US-5,801,105	09/01/1998	Yano, Yoshihiko , et al.	438	785	06/14/1996
	US-5,810,923	09/22/1998	Yano, Yoshihiko , et al.	117	84	05/10/1996
10,10	US-5,822,256	10/13/1998	Bauer, Mark, et al.	365	200	03/05/1997

EXAMINER On 11/1 DATE CONSIDERED 2/21/06

Substitute for farm 1449A/PTO		PTO/S8/084(10-01) Approved for use through 10/31/2002, OMB 651-0031 US Pasmit Trademan Office: U.S. GEPARTMENT OF COMMERCE required to respond to a collection of information unless it contains a valid OMB control number.		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)	Application Number	Unknown 10/789.042		
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	First Named Inventor	Ahn, Kie		
	Group Art Unit	Unknown Z8 (5		
	Examiner Name	Unknown A. W. MON		
Sheet 2 of 7	Attorney Docket No: 1	1303.050US2		

OU	Q US-5,828,080	10/27/1998	Yano, Yoshihiko , et al.	257	43	04/17/1995
	US-5,840,897	11/24/1998	Kirlin, Peter, et al.	546	2	06/07/1995
	US-5,916,365	06/29/1999	Sherman, Arthur	117	92	08/16/1996
	US-5,972,847	10/26/1999	Feenstra, Roeland , et al.	505	473	01/28/1998
	US-6,013,553	01/11/2000	Wallace, Robert , et al.	438	287	07/15/1998
	US-6,020,024	02/01/2000	Maiti, Bikas , et al.	427	248.1	08/04/1997
	US-6,027,961	02/22/2000	Maiti, Bikas , et al.	438	199	06/30/1998
	US-6,057,271	05/02/2000	Kenjiro, Higaki, et al.	505	475	06/07/1995
	US-6,093,944	07/25/2003	VanDover, Robert B.	257	310	06/04/1998
	US-6,110,529	08/29/2000	Gardiner, R. A., et al.	427	250	06/07/1995
	US-6,171,900	01/09/2001	Sun, Shi-Chung	438	240	04/15/1999
П	US-6,203,613	03/20/2001	Gates, Stephen M., et al.	117	104	10/19/1999
	US-6,207,589	03/27/2001	Ma, Yanjun, et al.	438	785	02/29/2000
	US-6,211,035	04/03/2001	Moise, Theodore, et al.	438	396	09/09/1999
	US-6,225,168	05/01/2001	Gardner, Mark, et al.	438	287	06/04/1998
	US-6,297,539	10/02/2001	Ma, Yanjun , et al.	257	410	07/06/2000
\sqcap	US-6,303,481	10/16/2001	Park, Dong	438	591	12/29/2000
	US-6,368,941	04/09/2002	Chen, Tai-Ju, et al.	438	424	11/08/2000
	US-6,380,579	04/30/2002	Nam, Sang-don , et al.	257	306	04/11/2000
	US-6,387,712	05/14/2002	Yano, Yoshihiko , et al.	438	3	12/03/1999
	US-6,391,769	05/21/2002	Lee, Jong-myeong , et al.	438	643	03/14/2000
	US-6,420,230	07/16/2002	Derderian, Garo , et al.	438	255	08/31/2000
	US-6,432,779	08/13/2002	Hobbs, Christopher, et al.	438	287	01/30/2001
	US-6,436,203	08/20/2002	Kaizuka, Takeshi , et al.	148	512	04/18/2000
	US-6,445,023	09/03/2002	Vaartstra, Brian , et al.	257	295	03/16/1999
	US-6,448,192	09/10/2002	Kaushik, Vidya S.	438	785	04/16/2001
	US-6,451,695	09/17/2002	Sneh, Ofer	438	685	12/22/2000
	US-6,458,701	10/01/2002	Chae, Yun-sook , et al.	438	680	10/12/2000
Oa	US-6,461,436	10/08/2002	Campbell, Philip H., et al.	118	715	10/15/2001

EXAMINER	0	wil	DATE CONSIDERED	2/21/00	<u> </u>

Substitute for form 1449A/PTO	Under the Paperwork Reduction Act of 1985, no persons are required to respond to a collection of information unless it contains a valid GMB control number. Complete if Known				
INFORMATION DISCLOSURE	Application Number	Unknown 10/789.042			
STATEMENT BY APPLICANT (Use as many sheets's a necessary)	Filing Date	Even Date Herewith			
	First Named Inventor	Ahn, Kie			
	Group Art Unit	Unknown Z8/5			
	Examiner Name	Unknown P. WI/100			
Sheet 3 of 7	Attorney Docket No: 1	1303.050US2			

ore	ÚS-6,465,334	10/15/2002	Buynoski, Matthew S., et al.	438	591	10/05/2000
	US-6,482,740	11/19/2002	Soininen, Pekka J., et al.	438	686	05/15/2001
	US-6,521,911	02/18/2003	Parsons, Gregory N., et al.	257	52	07/19/2001
en	/ US-6,627,260	09/30/2003	Derderian, Garo J., et al.	427	301	09/30/2002

Examiner Initials*	Foreign Document No	Publication Date	Name of Patentee or Applicant of cited Document	Class	Subclass	Ť
Due	EP-1096042	05/02/2001	Ramdani, J., et al.	C30B	25/02	
1	EP-1124262	08/16/2001	Ma, Y., et al.	H01L	29/51	
	JP-11-335849	12/07/1999	Horie, K., et al.	C23	16/44	
	JP-2001-332546	11/30/2001		H01L	21/316	
1	WO-01/97257	12/20/2001	Madhukar, S. , et al.	H01L		
0,110/	WO-02/43115	05/30/2002	Pomarede, C. F., et al.	H01L		

	OTHER	R DOCUMENTS NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No 1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
ore	/	AARIK, JAAN, et al., "Texture development in nanocrystalline hafnium dioxide thin films grown by atomic layer deposition", <u>Journal of Crystal Growth</u> , 220(1-2), (2000),105-113	
		AHN, SEONG-DEOK, et al., "Surface Morphology Improvement of Metalorganic Chemical Vapor Deposition Al Films by Layered Deposition of Al and Ultrathin TiN", <u>Japanese Journal of Applied Physics</u> , Part 1 (Regular Papers, Short Notes & Review Papers), 39(6A), (June 2000),3349-3354	
		ALEN, PETRA, "Atomic Layer deposition of Ta(Al)N(C) thin films using trimethylaluminum as a reducing agent", <u>Journal of the Electrochemical Society</u> , 148(10), (October 2001),G566-G571	
		CHENG, BAOHONG, et al., "The Impact of High-k Gate Dielectrics and Metal Gate Electrodes on Sub-100nm MOSFET's", IEEE Transactions on Electron Devices, 46(7), (July 1999),1537-1544	
		CLARK-PHELPS, R. B., et al., "Engineered Tantalum Aluminate and Hafnium Aluminate ALD Films for Ultrathin Dielectric Films with Improved Electric and Thermal Properties", Gate Stack and Silicide Issues in Silicon Processing II. Symposium (Materials Research Society Symposium Proceedings Vol.670), (Apr. 17, 2001),K2.2.1-6	
OW		DESU, S B., "Minimization of Fatigue in Ferroelectric Films", Physica Status Solidi A, 151(2), (1995),467-480	

	7	100	MONIA	CITOA			
EXAMINER	Q,	W	Lee		DATE CONSIDERED	4231	106

PTO/SB/084(10-01)
Approved for use through 10/31/2002, CMB 651-0031
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Application Number	Unknown 10/789042			
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	First Named Inventor	Ahn, Kie			
	Group Art Unit	Unknown 28/5			
	Examiner Name	Unknown A. Wilson			
Sheet 4 of 7	Attorney Docket No: 1	1303.050US2			

610	ELAM, J W., "Kinetics of the WF6 and Si2H6 surface reactions during tungsten
WWX-	atomic layer deposition", Surface Science, 479(1-3), (May 2001),121-135
	ENGELHARDT, M., "Modern Applications of Plasma Etching and Patterning in
p	Silicon Process Technology", Contributions to Plasma Physics, 39(5),
	(1999),473-478
}	FUYUKI, TAKASHI, et al., "Electronic Properties of the Interface between Si and
	TiO2 Deposited at Very Low Temperatures", <u>Japanese Journal of Applied</u>
	Physics, Vol. 25, No. 9, (1986),1288-1291
	GARTNER, M., et al., "Spectroellipsometric characterization of lanthanide-
	doped TiO/sub 2/ films obtained via the sol-gel technique", Thin Solid Films,
	234(1-2), (1993),561-565
	GELLER, S., et al., "Crystallographic Studies of Perovskite-like Compounds. II.
	Rare Earth Aluminates", Acta Cryst. Vol. 9, (May 1956),1019-1025
	GIESS, E. A., et al., "Lanthanide gallate perovskite-type substrates for epitaxial,
	high-T/sub c/ superconducting Ba/sub 2/YCu/sub 3/O/sub 7- delta / films", IBM
	Journal of Research and Development, 34(6), (November 1990),916-926
	GUSEV, E.P., et al., "Ultrathin High-K Dielectrics Grown by Atomic Layer
	Deposition: A Comparative Study of ZrO2, HfO2, Y2O3 and Al2O3",
	Electrochemical Society Proceedings Volume 2001-9, (2001),189-195
	HIRAYAMA, MASAKI, et al., "Low-Temperature Growth of High-Integrity Silicon
	Oxide Films by Oxygen Radical Generated in High Density Krypton Plasma",
	International Electron Devices Meeting 1999. Technical Digest, (1999),249-252
	HUBBARD, K. J., et al., "Thermodynamic stability of binary oxides in contact with"
	silicon", Journal of Materials Research, 11(11), (November 1996),2757-2776
	HUNT, C. E., et al., "Direct bonding of micromachined silicon wafers for laser
	diode heat exchanger applications", Journal of Micromechanics and
	Microengineering, 1(3), (September 1991),152-156
	JEONG, CHANG-WOOK, et al., "Plasma-Assisted Atomic Layer Growth of
	High-Quality Aluminum Oxide Thin Films", Japanese Journal of Applied Physics.
	Part 1: Regular Papers and Short Notes and Review Papers, 40(1), (January
	2001),285-289
	KEOMANY, D, et al., "Sol gel preparation of mixed cerium-titanium oxide thin
	films", Solar Energy Materials and Solar Cells, 33(4), (August 1994),429-441
 	KIM, C T., et al., "Application of Al2O3 Grown by Atomic Layer Deposition to
	DRAM and FeRAM", International Symposium in Integrated Ferroelectrics,
	(March 2000),316
 	KIM, D., et al., "Atomic Control of Substrate Termination and Heteroepitaxial
	Growth of SrTiO3/LaAlO3 Films", Journal of the Korean Physical Society, 36(6),
	(June 2000),444-448
	KIM, Y, et al., "Substrate dependence on the optical properties of Al/sub
12. 1	2/O/sub 3/ films grown by atomic layer deposition", Applied Physics Letters,
Y (), (10)	
HO W	71(25, 22), (December 1997),3604-3606

* NO MONTH CITED.

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Application Number	Unknown 10 189.047		
(Use as many sheets as necessary)	Filing Date	Even Date Herewith		
	First Named Inventor	Ahn, Kie		
	Group Art Unit	Unknown 28/5		
	Examiner Name	Unknown A. WILFON		
Sheet 5 of 7	Attorney Docket No: 1	1303.050US2		

	KRAUTER, G., et al., "Room Temperature Silicon Wafer Bonding with Ultra-Thin	
$\omega u \lambda \lambda$	Polymer Films", Advanced Materials, 9(5), (1997),417-420	
	KUKLI, KAUPO, "Atomic Layer Deposition of Titanium Oxide from Til4 and	
	H2O2", Chemical Vapor Deposition, 6(6), (2000),303-310	
	KUKLI, K, et al., "Controlled growth of yttrium oxysulphide thin films by atomic	
	layer deposition", Materials Science Forum, 315-317, (1999),216-221	
	LEE, A E., et al., "Epitaxially grown sputtered LaAlO3 films", Applied Physics	
	Letters, 57(19), (November 1990),2019-2021	
	LEE, CHENG-CHUNG, et al., "lon-assisted deposition of silver thin films", Thin	
	Solid Films, 359,(2000),pp. 95-97	
	LEE, JUNG-HYOUNG, et al., "Mass production worthy HfO/sub 2/-Al/sub	
	2/O/sub 3/ laminate capacitor technology using Hf liquid precursor for sub-100	
	nm DRAMs", Electron Devices Meeting, 2002. IEDM '02. Digest. International,	
	(2002),221-224	
	LEE, DONG H., et al., "Metalorganic chemical vapor deposition of TiO/sub 2/:N	-
	anatase thin film on Si substrate", Applied Physics Letters, 66(7). (February	
	1995),815-816	
	LEE, L P., et al., "Monolithic 77 K dc SQUID magnetometer", Applied Physics	
	<u>Letters</u> , 59(23), (December 1991),3051-3053	
	LESKELA, M., et al., "ALD precursor chemistry: Evolution and future	
	challenges", J. Phys. IV France, 9, (1999),837-852	
	LIU, C. T., "Circuit Requirement and Integration Challenges of Thin Gate	
	Dielectrics for Ultra Small MOSFETs", International Electron Devices Meeting	
	1998. Technical Digest, (1998),747-750	
	LUCOVSKY, G, et al., "Microscopic model for enhanced dielectric constants in	
	low concentration SiO/sub 2/-rich noncrystalline Zr and Hf silicate alloys",	
	Applied Physics Letters, 77(18), (October 2000),2912-2914	
	MOLODYK, A A., et al., "Volatile Surfactant-Assisted MOCVD: Application to	
	LaAl03 Thin Film Growth", Chemical Vapor Deposition, 6(3), (June 2000),133-	
	138	
,	MOLSA, HEINI, et al., "Growth of yttrium oxide thin films from beta -diketonate	
	precursor", Advanced Materials for Optics and Electronics, 4(6), (November-	
	December 1994),389-400	
	MULLER, D. A., et al., "The electronic structure at the atomic scale of ultrathin	
	gate oxides", Nature, 399(6738), (June 24, 1999),758-61	
	MULLER, D. A., et al., "The electronic structure at the atomic scale of ultrathin	
	oxides", Nature, Vol. 399, Nature, Vol. 399, (1999), p. 752	
	NAKAJIMA, ANRI, et al., "NH/sub 3/-annealed atomic-layer-deposited silicon	
	nitride as a high-k gate dielectric with high reliability", Applied Physics Letters,	
\	80(7), (February 2002),1252-1254	
)	NEUMAYER, D A., et al., "Materials characterization of ZrO/sub 2/-SiO/sub 2/	
10 110/	and HfO/sub 2/-SiO/sub 2/ binary oxides deposited by chemical solution	
40 40	deposition", Journal of Applied Physics, 90(4), (August 15, 2001),1801-1808	
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EXAMINER	0, W.le	DATE CONSIDERED	2/2/106
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)	Application Number	Unknown 10/789,842		
	Filing Date	Even Date Herewith		
	First Named Inventor	Ahn, Kie		
	Group Art Unit	Unknown 28/5		
	Examiner Name	Unknown A. WILFON		
Sheet 6 of 7	Attorney Docket No: 1	303.050US2		

	NIEMINEN, MINNA, et al., "Formation and stability of lanthanum oxide thin films	
Aug	deposited from B-diketonate precursor", Applied Surface Science, 174(2), (April	
1/4/1/1/	16, 2001),155-165	
	OH, C B., et al., "Manufacturable embedded CMOS 6T-SRAM technology with	
N	high-k gate dielectric device for system-on-chip applications", Technical Digest of	
	International Electron Devices Meeting 2002, (2002),423-426	
	OHRING, MILTON, "The Materials Science of Thin Films", Boston : Academic	
	Press, (1992),118,121,125	
	OSTEN, H. J., et al., "High-k gate dielectrics with ultra-low leakage current based	
	on praseodymium oxide", <u>International Electron Devices Meeting 2000.</u>	
	Technical Digest. IEDM, (2000),653-656	
	PARK, BYUNG-EUN , et al., "Electrical properties of LaAlO3/Si and	
1 1	Sr0.8Bi2.2Ta2O9/LaAlO3/Si structures", Applied Physics Letters, 79(6), (August	
1	2001),806-808	
 	QI, WEN-JIE, et al., "MOSCAP and MOSFET characteristics using Zr02 gate	
1	dielectric deposited directly on Si", <u>Electron Devices Meeting</u> , 1999. IEDM	
	Technical Digest. International, (1999),145-148 RAYNER JR., G , et al., "The structure of plasma-deposited and annealed	
1 1	RAYNER JR., G., et al., "The structure of plasma-deposited and annealed	
1 1	pseudo-binary ZrO2-SiO2 alloys", <u>Materials Research Society Symposium</u>	
<u> </u>	Proceedings, 611, (2000),C131-C139	
	RITALA, MIKKO, "Atomic Layer Epitaxy Growth of Titanium, Zirconium and	
	Hafnium Dioxide Thin Films", Annales Academiae Scientiarum Fennicae,	
	(1994),24-25	
	ROTONDARO, A L., et al., "Advanced CMOS Transistors with a Novel HfSiON	
	Gate Dielectric", Symposium on VLSI Technology Digest of Technical Papers.	
	(2002),148-149	
1 1	SAITO, YUJI, et al., "Advantage of Radical Oxidation for Improving Reliability of	
	Ultra-Thin Gate Oxide", 2000 Symposium on VLSI Technology Digest of	
LL	Technical Papers, (2000),176-177	
	SAITO, YUJI, et al., "High-Integrity Silicon Oxide Grown at Low-Temperature by	
1	Atomic Oxygen Generated in High-Density Krypton Plasma", Extended Abstracts	
1 1	of the 1999 International Conference on Solid State Devices and Materials,	
<u> </u>	(1999),152-153	
	SHANWARE, A, et al., "Reliability evaluation of HfSiON gate dielectric film with	
	12.8 A SiO2 equivalent thickness", International Electron Devices Meeting.	
L	<u>Technical Digest</u> , (2001),137-140	
	SHIN, CHANG H., et al., "Fabriation and Characterization of MFISFET using	
	Al2O3 Insulating Layer for Non-Volatile Memory", 12th International Symposium	
1 <i>1</i>	in Integrated Ferroelectrics, (March 2000),1-9	
	SNEH, OFER, et al., "Thin film atomic layer deposition equipment for	
<i> </i>	semiconductor processing", Thin Solid Films, 402(1-2), (Jan. 1, 2002),248-261	
t	/ SONG, HYUN-JUNG, et al., "Atomic Layer Deposition of Ta2O5 Films Using	
A.in	Ta(OC2H5)5 and NH3", Ultrathin SiO/sub 2/ and High-K Materials for ULSI Gate	
WILL!	Dielectrics. Symposium, (1999),469-471	

EXAMINER D. MIJOT _____ DATE CONSIDERED Z/ZI/CO

PTC/S9/08A(10-01 Approved for use through 10/31/2002, CMB 651-0031 Retire & Trademark Office; U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449A/PTO	Complete if Known	required to respond to a consistion of traditional disease.	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as nocessary)	Application Number	Unknown 10/789.04-2	
	Filing Date	Even Date Herewith	
	First Named Inventor	Ahn, Kie	
	Group Art Unit	Unknown 28/5	
	Examiner Name	Unknown R. Wilson	
Sheet 7 of 7	Attorney Docket No: 1	1303.050US2	

/	·	
	SUNTOLA, T., "Atomic Layer Epitaxy", Handbook of Crystal Growth, 3; Thin	
A NO	Films of Epitaxy, Part B: Growth Mechanics and Dynamics,	
1/1/1//	Amsterdam.(1994).602-663	
	SUNTOLA, T, "Atomic layer epitaxy", Thin Solid Films, 216(1), (August 28,	
!	1992),84-89	
	VAN DOVER, R B., "Amorphous lanthanide-doped TiOx dielectric films",	
	Applied Physics Letters, 74(20), (May 1999),3041-3043	
	VIIROLA, H. "Controlled growth of antimony-doped tin dioxide thin films by	.
	atomic layer epitaxy", Thin Solid Films, 251, (November 1994),127-135	
	VIIROLA, H, "Controlled growth of tin oxide thin films by atomic layer epitaxy",	
	Thin Solid Films, 249(2), (September 1994),144-149	
	VISOKAY, M R., "Application of HfSiON as a gate dielectric material", Applied	
	Physics Letters, 80(17), (April 2002),3183-3185	
	WILK, G D., et al., "Hafnium and zirconium silicates for advanced gate	
}	dielectrics", Journal of Applied Physics, 87(1), (January 2000),484-492	
	WILK, G. D., et al., "High-K gate dielectrics: Current status and materials	
1 4 1	properties considerations", Journal of Applied Physics, 89(10), (May 2001),5243-	
	5275	
RV	ZUCKER, O, et al., "Application of Oxygen Plasma Processing to Silicon Direct	
166/	Bonding", Sensors and Actuators A, 36, (1993),227-231	

* No month cited

Substitute for form 1449A/P INFORMATION I STATEMENT BY	DISCLOSURE
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Sheet 1 of 2	TRADEMINITARY

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First Named Inventor	Ahn, Kie	
Group Art Unit	2812 2815	
Examiner Name	Linknowir A. Wilson	

	US PATENT DOCUMENTS				
Examiner Initial *	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Filing Date If Appropriate	
1000	US-2002/00001971-A1	01/03/2002	Cho, Hag-ju	06/27/2001	
V .	US-2002/0111001	08/15/2002	Ahn, Kie Y., et al.	02/09/2001	
	US-2002/0122885	09/05/2002	Ahn, Kie Y.	03/01/2001	
	US-2002/0195056	12/26/2002	Sandhu, G., et al.	12/26/2002	
	US-2003/0003722	01/02/2003	Vaartstra, Brian A.	08/19/2002	
	US-2003/0157764	08/21/2003	Ahn, Kie Y., et al.	02/20/2002	
	US-2003/0209324-A1	11/13/2003	Fink, S. T.	03/31/2003	
	US-2003/0227033	12/11/2003	Ahn, Kie Y., et al.	06/05/2002	
	US-2003/0228747	12/11/2003	Ahn, Kie Y., et al.	06/05/2002	
	US-2004/0004245	01/08/2004	Forbes, Leonard, et al.	07/08/2002	
	US-2004/0004247	01/08/2004	Forbes, Leonard, et al.	07/08/2002	
	US-2004/0033681	02/19/2004	Ahn, Kie Y., et al.	08/15/2002	
	US-2004/0033701-A1	02/19/2004	Ahn, K. Y., et al.	08/15/2002	
	US-2004/0038525-A1	02/26/2004	Meng, S., et al.	08/26/2002	
	US-4,058,430	11/15/1977	Suntola, T., et al.	11/25/1975	
	US-4,725,877	02/16/1988	Brasen, Daniel, et al.	04/11/1986	
	US-6,010,969	01/04/2000	Vaarstra, Brian A.	10/02/1996	
	US-6,203,726	03/20/2001	Danielson, Earl, et al.	10/07/1999	
	US-6,225,237	05/01/2001	Vaartstra, Brian A.	09/01/1998	
	US-6,238,976	05/29/2001	Noble, Wendell P., et al.	02/27/1998	
	US-6,273,951	08/14/2001	Vaartstra, Brian A.	06/16/1999	
	US-6,368,398	04/09/2002	Vaartstra, Brian A.	01/19/2001	
	US-6,451,641	09/17/2002	Halliyal, Arvind, et al.	02/27/2002	
	US-6,495,436	12/17/2002	Ahn, Kie Y., et al.	02/09/2001	
	US-6,527,866	03/04/2003	Matijasevic, Vladimir , et al.	02/09/2000	
	US-6,531,354	03/11/2003	Maria, J., et al.	01/17/2001	
7	US-6,537,613	03/25/2003	Senzaki, Y., et al.	04/10/2000	
	US-6,586,349	07/01/2003	Jeon, J. S., et al.	02/21/2002	
	US-6,645,882	11/11/2003	Halliyal, Arvind, et al.	01/17/2002	
$\Box T$	US-6,660,660	12/09/2003	Haukka, S. P., et al.	08/31/2001	
	US-6,713,846	03/30/2004	Senzaki, Y.	01/25/2002	
1	JUS-6,730,575	05/04/2004	Eldridge, Jerome M.	08/30/2001	
10/1/07	US-6,750,066	06/15/2004	Cheung, F. T., et al.	04/08/2002	

FOREIGN PATENT DOCUMENTS				
Examiner Initials*	Foreign Document No	Publication Date	Name of Patentee or Applicant of cited Document	T²

EXAMINER

DATE CONSIDERED

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT E	Application Number	10/789,042
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	First Named Inventor	Ahn, Kie
	Group Art Unit	2812 28/5
ROV 2 9 ZOON	Examiner Name	Unknown A. WILSO
Sheet 2 of 2	Attorney Docket No: 1303.050US2	

	OTHE	R DOCUMENTS NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
DAO		TAKEMOTO, J. H., et al., "Microstrip Resonators and Filters Using High-TC Superconducting Thin Films on LaAlO3", <u>IEEE Transaction on Magnetics</u> , 27(2), (March 1991), 2549-2552	